

LISTING OF THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Previously Presented) A capsule comprising:

a first member and

a second member,

wherein said capsule is adapted for containing a dose of particles to be delivered within a pressurized fluid flow,

wherein said first and second members are coupled together to provide a closed pocket within the members for containing the dose,

wherein one of said first and second members is configured to slide relative to the other member when an external portion of said capsule is contacted with the pressurized fluid flow, and

wherein said first and second members are constructed and arranged such that upon said relative movement a passage is formed through said capsule and said pocket is opened to expose the dose of particles for entrainment in the pressurized fluid flowing through said passage.

2. (Previously Presented) A capsule adapted for containing a dose of particles to be delivered within a pressurized fluid flow, said capsule comprising:

a first member and

a second member,

wherein said first and second members are coupled together to provide a closed pocket within the members for containing the dose, and one of said first and second members is moveable relative to the other member when an external portion of said capsule is contacted with a pressurized fluid flow, said first and second members being constructed and arranged such that upon said relative movement a passage is formed through said capsule and said pocket is opened to expose the dose for entrainment in fluid flowing through said passage, and

wherein the second member is a housing and the first member is a plug which is inserted into said housing.

3. (Previously Presented) A capsule adapted for containing a dose of particles to be delivered within a pressurized fluid flow, said capsule comprising:

a first member and

a second member,

wherein said first and second members are coupled together to provide a closed pocket within the members for containing the dose, and one of said first and second members is moveable relative to the other member when a portion of said capsule is contacted with a pressurized fluid flow, said first and second members being constructed and arranged such that upon said relative movement a passage is formed through said capsule and said pocket is opened to expose the dose for entrainment in fluid flowing through said passage,

wherein the second member is a housing and the first member is a plug which is inserted into said housing, and

wherein the plug and the housing contact each other at upper and lower opposing faces thereof, and the closed pocket is provided by an intermediate space established between said upper and lower opposing faces where said plug and housing do not contact each other.

4. (Previously Presented) A capsule adapted for containing a dose of a particles to be delivered within a pressurized fluid flow, said capsule comprising:

a first member and

a second member,

wherein said first and second members are coupled together to provide a closed pocket within the members for containing the dose, and one of said first and second members is moveable relative to the other member when a portion of said capsule is contacted with a pressurized fluid flow, said first and second members being constructed and arranged such that upon said relative movement a passage is formed through said capsule and said pocket is opened to expose the dose for entrainment in fluid flowing through said passage,

wherein the second member is a housing and the first member is a plug which is inserted into said housing, and

wherein the plug and the housing contact each other at upper and lower opposing faces thereof, and further wherein the closed pocket is provided by a cavity or recess formed in the plug and/or housing, and said cavity or recess is positioned between said upper and lower opposing faces.

5. (Original): The capsule of claim 4, wherein the cavity or recess is annular.

6. (Original) The capsule of claim 4, wherein the cavity or recess is formed in the plug.

7. (Previously Presented) The capsule of claim 6, wherein the cavity or recess is also formed in the housing.

8. (Original) The capsule of claim 2, wherein the plug is moveable within the housing when said capsule is contacted with a pressurized fluid flow.

9. (Original) The capsule of claim 2, wherein the housing is moveable from around the plug when said capsule is contacted with a pressurized fluid flow.

10. (Original) The capsule of claim 1, wherein the first and second members are respectively first and second halves of a vertically divided plug.

11. (Original) The capsule of claim 10, wherein the first and second halves of the plug contact each other at opposing faces thereof, and the closed pocket is provided by corresponding cavities disposed within said opposing faces.

12. (Original) The capsule of claim 1, wherein the first and second members are coupled together to form the closed pocket by a resilient coupling means.

13 (Previously Presented) The capsule of claim 1, wherein said closed pocket is pre-filled with the dose of the particles and said first and second members are sealably coupled together.

14. (Previously Presented) A syringe for delivering a dose of particles within a pressurized fluid flow, said syringe comprising:

- (a) an upstream portion which is interfaced with a source of fluid under pressure;
- (b) a downstream nozzle portion;
- (c) an intermediate portion arranged between the upstream and downstream portions, wherein said intermediate portion comprises first and second members which are coupled together to provide a closed pocket within the members for containing the dose of the particles, and further wherein one of said first and second members is configured to slide relative to the other member; and
- (d) an actuator mechanism for initiating a flow of fluid from the source of fluid to the intermediate portion whereby pressure exerted by the fluid causes one of said first and second members to move relative to the other member, said first and second members being constructed and arranged such that upon said relative movement a passage is formed through said intermediate portion and said pocket is opened to expose the dose for entrainment in the fluid flowing through said passage and into the downstream nozzle portion.

15. (Original) The syringe of claim 14, wherein the first member of the intermediate portion comprises a tubular housing having an upstream opening and a downstream opening, the second member of the intermediate portion comprises a plunger having a lower end which is disposed within and closes off said downstream opening of said housing, and the closed pocket is provided by a space established between the lower end of the plunger and the inner surface of the downstream opening.

16. (Original) The syringe of claim 15, wherein the closed pocket is further provided by a cavity disposed within the lower end of the plunger.

17. (Original) The syringe of claim 15, wherein an upper end of the plunger extends toward the upstream portion of the syringe and is supported by a bar which is supported at both ends by the intermediate portion of the syringe and is initially deflected towards the upstream portion of the syringe.

18. (Original) The syringe of claim 17, wherein pressure exerted by the fluid causes the bar to travel through a dead-center position and deflect towards the downstream portion of the syringe, thereby causing the lower end of the plunger to dislodge from said downstream opening and move in a downstream direction relative to the housing to provide a passage through said intermediate portion of the syringe.

19. (Previously Presented) The syringe of claim 14, wherein the fluid is a compressible gas.

20. (Original) The syringe of claim 14 further comprising means for providing resistance against initial movement of said first or second member relative to the other member.

21. (Previously Presented) The syringe of claim 14, wherein the closed pocket is prefilled with the dose of the particles and said first and second members are sealably coupled together.

22. (Previously Presented) A syringe for delivering a dose of particles within a pressurized fluid flow, said syringe comprising:

- (a) an upstream portion which is interfaced with a source of fluid under pressure;
- (b) a downstream nozzle portion;
- (c) an intermediate portion arranged between the upstream and downstream portions, wherein said intermediate portion comprises first and second members which are coupled together to provide a closed pocket for containing the dose of the particles, and further wherein one of said first and second members is configured to slide relative to the other member; and
- (d) an actuator mechanism for initiating a flow of fluid from the source of fluid to the intermediate portion whereby pressure exerted by the fluid causes one of said first and second members to move relative to the other member, said first and second members being constructed and arranged such that upon said relative movement a passage is formed through said intermediate portion and said pocket is opened to expose the dose for entrainment in the fluid flowing through said passage and into the downstream nozzle portion,
wherein the closed pocket is prefilled with the dose of the particles and said first and second members are sealably coupled together, and
wherein the fluid is a compressible gas.

23. (Original) The syringe of claim 21 further comprising means for providing resistance against initial movement of said first or second member relative to the other member.

24. (Original) The syringe of claim 14, wherein the first member of the intermediate portion comprises a tubular housing having an inner surface, an upstream opening and a downstream opening, and the second member of the intermediate portion comprises a disk having a centrally disposed plug attached thereto, wherein said disk closes off the downstream opening of said housing and said plug extends toward the upstream portion of the syringe and closes off the upstream opening of said housing, and further wherein the closed pocket is provided by an annular space established between the disk, the outer surface of the plug, and the inner surface of the housing.

25. (Original) The syringe of claim 24, wherein pressure exerted by the fluid causes the plug to dislodge from the upstream opening and move in a downstream direction relative to the housing, thereby exerting sufficient pressure upon the disk to deform and cause said disk to pass through the downstream opening and create a passage through the intermediate portion of the syringe.

26. (Previously Presented) A capsule comprising:

a first member and

a second member,

wherein said capsule is adapted for containing a dose of a therapeutic agent to be delivered within a pressurized fluid flow,

wherein said first and second members are coupled together to provide a closed pocket within the members for containing the dose,

wherein one of said first and second members is configured to slide relative to the other member when an external portion of said capsule is contacted with the pressurized fluid flow, and

wherein said first and second members are constructed and arranged such that upon said relative movement a passage is formed through said capsule and said pocket is opened to expose the dose of the therapeutic agent for entrainment in the pressurized fluid flowing through said passage.

27. (Previously Presented) The capsule of claim 26, wherein the fluid is a compressible gas.

28. (Previously Presented) The capsule of claim 26, wherein the dose of the therapeutic agent is in particulate form.

29. (Previously Presented) The capsule of claim 1, wherein the particles comprise a therapeutic agent.

30. (Previously Presented) The capsule of claim 2, wherein the particles comprise a therapeutic agent.

31. (Previously Presented) The capsule of claim 3, wherein the particles comprise a therapeutic agent.

32. (Previously Presented) The capsule of claim 4, wherein the particles comprise a therapeutic agent.

33. (Previously Presented) The syringe of claim 14, wherein the particles comprise a therapeutic agent.

34. (Previously Presented) The syringe of claim 22, wherein the particles comprise a therapeutic agent.